Monday, 10th April 2006

The National Organic Standards Board
c/o Valerie Frances
Room 4008 – South Building
1400 & Independence Avenue, SW
Washington, D.C. 20250-0001

Dear Members of the NOSB,

I appreciate the opportunity to comment on the NOSB Aquaculture Working Group Interim Final Report. I have been active in aquaculture feed manufacturing for over 32 years. My company has been in business for over 75 years, and engaged in aquaculture feed production for better than 45 years. We provide nutritionally-balanced, formulated diets to commercial finfish production (coldwater, coolwater and warmwater) throughout the United States, and also provide many of the state and federal hatchery programs involved in mitigation, native species restoration and endangered species.

I've had the opportunity to participate in organic aquaculture development in the USA for about six years when the USDA-NOSB supported an organic aquaculture workshop at the University of Minnesota, under the capable direction of Deborah Brister and Anne Kapucinski. Since then, I've served on the NOSB's Aquaculture Working Group (2000-2001, M. Wittenberg & J. Riddle) and I've been co-chair of the ad hoc committee of industry stakeholders, the National Organic Aquaculture Working Group ("NOAWG") since it's inception a few years ago. I was an editor of the NOAWG White Paper, presented to the NOP in 2005.

It is my belief that the NOSB-AWG Interim Final Report ("Report") does an excellent job of expressing standards in a format that is congruent to the USDA-NOP's existing standards in the Final Rule. I've heard that some are calling for specificity of standards for each aquatic animal. The NOSB-AWG, a body of aquaculture experts under the guidance of NOP/NOSB personnel, support the use and format of the Final Rule as the principle guidance for this document. It would be unwarranted to demand pages and pages of detail within the Final Rule to deal with animals as diverse as shrimp, tilapia,

salmon and tuna. How would one deal with the full list of aquacultured animals, and emerging candidates?

Aquatic animals diverge in several areas from a simple template of the livestock program. Fish live in water, that's different. Fish breathe and expel metabolized-nutrients as waste and metabolites (other creatures in appropriate concentrations directly into the same environment they dwell, consume, reproduce, etc. Fish can demonstrate a proclivity to school in tighter populations. Fish eat other creatures, loosely defining them as carnivorous; including their own species, i.e. eggs and smaller fish. These differences suggest that there is a valid case for a separate set of rules for aquatic animals, drawing on the existing livestock rules whenever practical, but recognizing that a typical vegetarian-pastoral model does not necessarily describe all domesticated, food-animals.

Nutrients are different. Aquatic animals are generally designed to be consumers of proteins and fats. Carbohydrates are down the list. In fact, fish often manifest clinical intolerance to complex and simple sugars in diets, including mortality. It is my belief that fishmeal and fish oil are essential nutrients under an organic model for coldwater, coolwater and many warmwater aquatic animals; if we are talking about animal health as the most important goal. In the absence synthetic amino acids, and proscribing the use of animal byproduct proteins obtained from organic mammalian and poultry slaughter/rendering (which I personally endorse) indicates that serious amino acid deficiencies will be realized in the absence of credible, highly digestible and available feedstuffs. In scientific diet studies, fishmeal is the benchmark protein by which other proteins are compared. Thus far, vegetable proteins, such as soybeans, although a protein compliment in feeds, does have anti-nutritional drawbacks in fish nutrition. Some aquatic animals, such as atlantic salmon, have no tolerance for soybean, exhibiting something quite similar to human wheat gluten intolerance. USDA, academia, and industry stakeholders are currently assessing how, why and what to do about improving vegetable protein utilization in fish nutrition. Much of the problem resides in the carbohydrate-fractions of these foodstuffs.

In addition, available long-chain omega-3 fatty acids (EPA & DHA) from algae production has yet to meet market relevance. Until now these products, with limited production, have been making their way into nutriceutics and infant formulas, though testing of aquatic animals with low requirements for these fatty acids is proving successful.

Perhaps some of these issues will require a five-to-ten year probationary period which allows the organic program to assess and fine tune standards as the program evolves.

I've touched on just a few of the issues tackled in the Interim Final Report. It's my understanding that public input will again be invited as development progresses. But, I do wish to re-affirm that the NOSB-AWG drafted a document that is consistent and germane to the organic program's Final Rule.

Best wishes to all members of the NOSB and strong encouragement to undertake rulemaking for the best aquatic standards promulgated around the globe. It raises the bar a little on several existing international standards and yet is very likely to be the harmonizing document that will encourage both domestic and foreign commerce.

Kindest regards,

Richard C. Nelson, VP
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